



BUILDING MARKHAM'S FUTURE TOGETHER
2020 – 2023 Strategic Plan



Markham High Frequency Rail Station Strategic Business Case

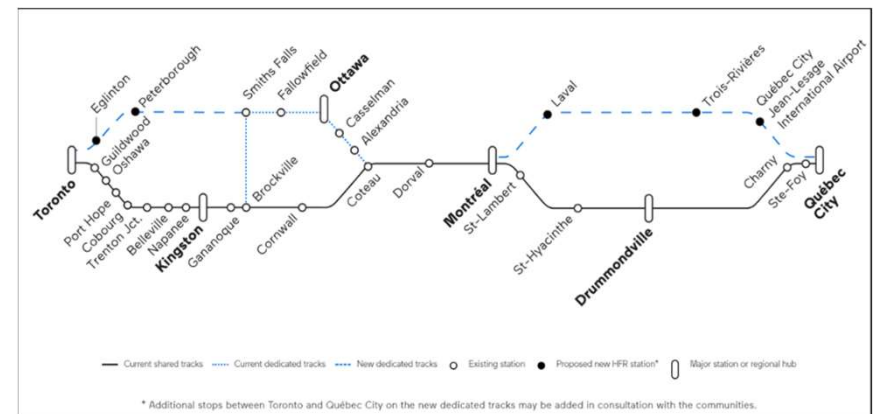
**November 27, 2023
Development Services Committee
City of Markham**



Context

- VIA Rail's High Frequency Rail concept is currently under development by the Federal Government and crown agencies, with procurement underway for a development partner
- The proposed corridor runs through Markham, without a stop in Markham
- The Strategic Business Case (SBC) for a new station on the corridor within Markham was initiated in 2022
- SBC speaks to the station's benefit at the local and regional levels and frames it as an enhancement to the inter-city regional rail solution

VIA Rail Canada's Proposed HFR Network





The Strategic Business Case

- The SBC examined the performance of a VIA HFR station in the Box Grove neighbourhood of Markham through Strategic, Economic, and Deliverability and Operational cases, covering:
 - **Strategic Case:** defines the range of benefits the project could realize
 - **Economic Case:** quantifies societal benefits and costs of the station
 - **Deliverability and Operations Case:** feasibility of station delivery and operations
- Business case framework follows regional and national best practice for large-scale transit projects
- The analysis found that a potential Markham station can support regional mobility and unlock economic development and tourism opportunities while strengthening Markham's role as a cultural and destination hub – but requires further review and development





Station Location Analysis

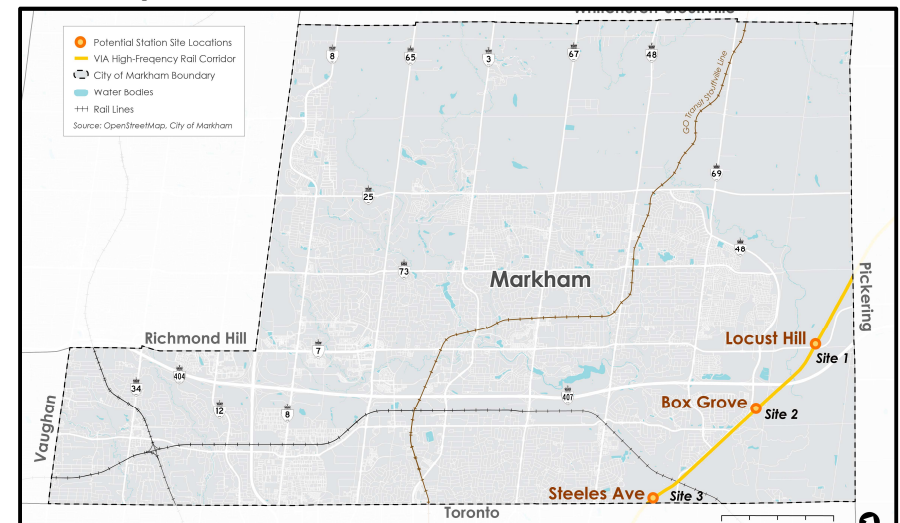
Three station locations within Markham were studied to determine the best performing site for full analysis in the SBC:

1. Locust Hill
2. Box Grove
3. Steeles

To identify the best performing site, station locations were assessed for alignment with:

- Existing transportation network connectivity
- Future transportation network connectivity
- Proximity to major destinations
- Existing and surrounding land use
- Development potential
- Feasibility to construct

Map of Potential Markham HFR Station Locations





Station Selection Criteria

The assessment determined **Box Grove** as the best performing option

Station Location	Existing Transportation Network Connectivity	Future Rapid Transportation Network Connections	Proximity to Major Destinations	Existing and Surrounding Land Use	Development Potential	Feasibility to Construct	TOTAL
Locust Hill							
Box Grove							
Steeles							



Strategic Case Summary

Purpose: Summarize the performance of the option against identified strategic outcomes to indicate if the investment addresses the Opportunity Statement, government policy objectives and benefits of the VIA HFR Project

Strategic Outcomes: four strategic outcome areas were identified to assess the case for an HFR station.

Outcome areas form the pillars of the Strategic Case narrative, with each supported by benefit categories (qualitative and quantitative).



Outcome 1: Enhancing
Markham and York Region
Economic Development



Outcome 2: Supporting Urban
Development



Outcome 3: Expanding Tourism



Outcome 4: Supporting the
Success of HFR and the Regional
Transportation Network



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Outcome 1: Enhancing Markham and York Region Economic Development



Providing new fast connections to employment centers

- A new connection from Markham to Toronto with **15–30-minute travel time**
- Increases access to Highway 404 employment corridor



Expanding talent that can easily access Markham and the surrounding York Region

- **Markham can be a net importer of jobs**
- **40,000 jobs** within a **5 km catchment** of the proposed station (as of 2041)
- **1,700 jobs** within a **30-minute walk** and **112,000 jobs** within a **60-minute transit ride** of the station location (2041)

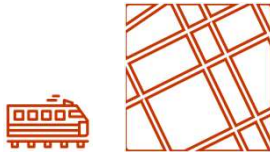


Growing the region's role as a knowledge centre and post-secondary destination

- Better connections between **York University Keele Campus and University of Toronto Scarborough and other post-secondary institutions along HFR corridor**
- Travel time savings for students travelling east of Markham



Outcome 2: Supporting Urban Development



Supporting Markham secondary plans and development areas

- Could **increase connections to high-density development Secondary Plan areas**
- Regional areas planned for intensification are **located within a 45-minute drive**



Creating development opportunities in Box Grove

- An HFR station could facilitate increased development in Box Grove and the surrounding neighborhoods



Supporting development of the Seaton Community and Northern Pickering

- A HFR Station could provide rail access to planned development in Pickering via transit or a short auto trip



Outcome 3: Expanding Tourism



Supporting Destination Markham and Experience York Region

- **Increasing the catchment area for** Markham's services, parks, trails, and cultural facilities
- Increased accessibility to York Region attractions



Increasing access to and usage of Rouge National Urban Park and Major Tourist Destinations

- Augmenting over **\$140m + investment** in Rouge National Urban Park with expanded access opportunities
- Increasing access opportunities to the Toronto Zoo, Toronto Pan Am Sports Centre, and other major destinations



Outcome 4: Supporting the Success of HFR and the Regional Transportation Network



Developing a 'Union Station Alternative' for easier access to VIA

- Compared to Union Station, Markham is:
 - **30 min faster** to access rail by car for **5 million residents** than Union Station
 - **1 hour faster to access by transit** for **1.8 million residents**



Growing the ridership of the HFR program

- Opportunity for **250-3,800 new daily HFR trips**
- Providing a market of **8 million people** and nearly **3 million jobs** within a **60-minute drive of the station** (2041)



Improved regional travel times and sustainability

- **30-40 minutes times savings** for regional travelers using the Markham HFR versus other modes



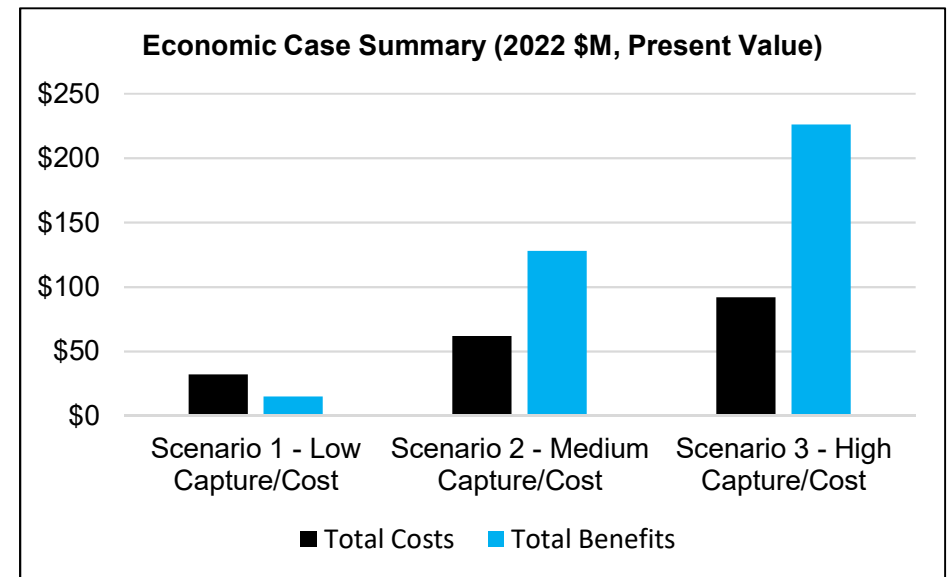
Provide rail service to a potential Pickering Airport

- An HFR station in Markham is well positioned to serve the proposed Pickering Airport by car as well as by potential transit expansions



Economic Case

- Three ridership 'capture rate' and cost scenarios were assumed to forecast a range of potential outcomes at Box Grove
 - Capture rates selected from existing regional rail corridors to represent low (1%), medium (8.5%), and high (15%) levels of potential demand for a Markham HFR service
- Potential benefits range from **\$15 M** in the low capture scenario to **\$226 M** in the high scenario
- **Potential benefits outweigh capital and operating and maintenance costs** under the medium and high capture rate scenarios



Impact Type	Scenario 1 - Low Capture/Cost	Scenario 2 - Medium Capture/Cost	Scenario 3 - High Capture/Cost
Benefit Cost Ratio	0.5	2.1	2.5
Net Present Value	\$(17) M	\$66 M	\$134 M



Deliverability and Operations Case

Findings:

- The proposed station is anticipated to be feasible from a construction and operating perspective, however no detailed engineering has been conducted to date
- The station could be delivered as part of the overall HFR program, or at a later date

Future Work:

- Further study with an eye to deliverability and operational considerations will need to occur
- Questions that could be asked to VIA to assist future project development include:
 - Confirmation of corridor alignment between Toronto and Peterborough
 - High level service specification – number of services between Toronto-Ottawa on the corridor
 - The criteria for deciding on stations between Toronto and Peterborough



Next Steps

Submit Strategic Business Case to VIA-HFR office and continue dialogue with Federal authorities

Longer-term: conceptual/preliminary station design and further forecasting on station benefits, costs and risks

